

Claims

1. A bumper assembly for a dock leveler system having a deck that can pivot,
comprising: a bumper moveable between an operative position and a retracted position
5 under an impetus of deck movement, wherein the bumper is moveable relative to the
deck.

2. The bumper assembly of claim 1, further comprising an engagement
10 surface carried by the bumper and being adapted to selectively engage and disengage the
deck upon the bumper moving between the operative position and the retracted position.

3. The bumper assembly of claim 1, further comprising a spring coupled to the
15 bumper to urge the bumper to the operative position.

4. The bumper assembly of claim 3, wherein the spring is a tension spring.

5. The bumper assembly of claim 3, wherein the spring is a compression spring.

6. The bumper assembly of claim 1, wherein the bumper pivots between the
25 operative position and the retracted position.

7. The bumper assembly of claim 1, wherein the bumper moves substantially
linearly between the operative position and the retracted position.

8. The bumper assembly of claim 1, wherein the bumper is moveable downward from the operative position to the retracted position in reaction to the deck pivoting downward.

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9. The bumper assembly of claim 1, wherein the bumper is moveable upward from the retracted position to the operative position in reaction to the deck pivoting upward.

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10. The bumper assembly of claim 1, further comprising a mechanism coupleable to the deck and the bumper and having an active mode and a disabled mode, wherein the mechanism in the active mode allows downward movement of the deck to move the bumper to the retracted position, and wherein the mechanism in the disabled mode allows downward movement of the deck while the bumper remains substantially at the operative position, whereby the disabled mode allows the deck to descend to a cross-traffic position while the bumper remains at the operative position.

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11. The bumper assembly of claim 10, wherein the dock leveler system includes a lip plate pivotally coupled to the deck, and wherein the mechanism is engageable by the lip so that movement of the lip positions the mechanism between the active mode and the disabled mode.

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12. The bumper assembly of claim 11, further comprising a release surface located to be engaged by the mechanism upon the deck descending to a predetermined below-dock position, wherein the mechanism engaging the release surface repositions the mechanism from the active mode to the disabled mode.

13. The bumper assembly of claim 1, wherein the bumper in the operative position is adapted to protrude above the deck, and wherein the bumper in the retracted position is adapted to be below the deck.

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14. A bumper assembly for a dock leveler system having a deck that can pivot, comprising:

a spring adapted to provide a spring force; and

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a bumper coupled to the spring and being moveable to a retracted position under an impetus of deck movement, and urged to an operative position under an impetus of the spring force.

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15. The bumper assembly of claim 14, further comprising an engagement surface carried by the bumper and being adapted to selectively engage the deck when the bumper is in the operative position and disengage the deck when the bumper is in the retracted position.

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16. The bumper assembly of claim 14, wherein the bumper is moveable downward from the operative position to the retracted position in reaction to the deck pivoting downward.

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17. The bumper assembly of claim 14, wherein the bumper is moveable upward from the retracted position to the operative position in reaction to the deck pivoting upward.

18. The bumper assembly of claim 14, wherein the bumper pivots between the

operative position and the retracted position.

19. The bumper assembly of claim 14, wherein the bumper moves substantially
5 linearly between the operative position and the retracted position.

20. The bumper assembly of claim 14, wherein the spring is a tension spring.

10 21. The bumper assembly of claim 14, wherein the spring is a compression spring.

22. The bumper assembly of claim 14, further comprising a mechanism coupleable to
15 the deck and the bumper and having an active mode and a disabled mode, wherein the
mechanism in the active mode allows downward movement of the deck to move the
bumper to the retracted position, and wherein the mechanism in the disabled mode allows
downward movement of the deck while the bumper remains substantially at the operative
position, whereby the disabled mode allows the deck to descend to a cross-traffic position
20 while the bumper remains at the operative position.

23. The bumper assembly of claim 22, wherein the dock leveler system includes a lip
plate pivotally coupled to the deck, and wherein the mechanism is engageable by the lip
25 so that movement of the lip positions the mechanism between the active mode and the
disabled mode.

24 The bumper assembly of claim 23, further comprising a release surface located to

be engaged by the mechanism upon the deck descending to a predetermined below-dock position, wherein the mechanism engaging the release surface repositions the mechanism from the active mode to the disabled mode.

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25. The bumper assembly of claim 14, wherein the bumper in the operative position is adapted to protrude above the deck, and wherein the bumper in the retracted position is adapted to be below the deck.

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26. A bumper assembly for a dock leveler system having a deck that can pivot, comprising:

a bumper moveable between an operative position and a retracted position under an impetus of deck movement; and

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an engagement surface carried by the bumper and being adapted to selectively engage and disengage the deck upon the bumper moving between the operative position and the retracted position.

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27. The bumper assembly of claim 26, further comprising a spring coupled to the bumper to urge the bumper to the operative position.

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28. The bumper assembly of claim 26, wherein the bumper is moveable downward from the operative position to the retracted position in reaction to the deck pivoting downward.

29. The bumper assembly of claim 26, wherein the bumper is moveable upward from

the retracted position to the operative position in reaction to the deck pivoting upward.

5 30. The bumper assembly of claim 26, further comprising a mechanism coupleable to the deck and the bumper and having an active mode and a disabled mode, wherein the mechanism in the active mode allows downward movement of the deck to move the bumper to the retracted position, and wherein the mechanism in the disabled mode allows downward movement of the deck while the bumper remains substantially at the operative position, whereby the disabled mode allows the deck to descend to a cross-traffic position
10 while the bumper remains at the operative position.

31. The bumper assembly of claim 30, wherein the dock leveler system includes a lip plate pivotally coupled to the deck, and wherein the mechanism is engageable by the lip
15 so that movement of the lip positions the mechanism between the active mode and the disabled mode.

20 32. The bumper assembly of claim 31, further comprising a release surface located to be engaged by the mechanism upon the deck descending to a predetermined below-dock position, wherein the mechanism engaging the release surface repositions the mechanism from the active mode to the disabled mode.

25 33. The bumper assembly of claim 26, wherein the bumper in the operative position is adapted to protrude above the deck, and wherein the bumper in the retracted position is adapted to be below the deck.